lipine Commission (Schurmann), for the establishment of the Phillipine Weather Bureau, with its headquarters at Manila.

1901. May 22. The Phillipine Weather Bureau was established by the act of the second United States Phillipine Commission (W. H. Taft, Chairman). See MONTHLY WEATHER REVIEW, 1901, 29:372–4.

CORRIGENDA.

In the MONTHLY WEATHER REVIEW for April, 1909, p. 148, column 2, paragraph 5 from the bottom change the date of founding of Blue Hill Observatory from 1880 to 1885; in the MONTHLY WEATHER REVIEW for May, 1909, p. 178, column 1, at the bottom of the page, insert "1885. Blue Hill Observatory founded by A. L. Rotch."

In MONTHLY WEATHER REVIEW, May, 1909, p. 196, column 1, under "1903," second title, for "Pasoeroean" read "Pasuruan."

THE ZODIACAL LIGHT.

The MONTHLY WEATHER REVIEW has several times published notes and articles bearing on the nature of the zodiacal light. The latest researches on this phenomenon may still have some interest for our readers.

The University of California[1] has just published the results of a careful photospectroscopic study by E. A. Fath, made during the autumns of 1907 and 1908 on Mount Hamilton, and under very favorable conditions during September, 1909, on Mount Wilson. The observations on Mount Hamilton yielded negatives of fairly good quality, using a slit-width of 0.38 millimeter and securing a spectrum on the plate of about 2.2 millimeters between $\lambda = 5{,}000$ and $\lambda = 3{,}900$. The spectrum negatives were not strong enough to definitely prove the presence or absence of the suspected absorption lines at about $\lambda = 4{,}300$ and $\lambda = 3{,}950$.

The Mount Wilson negatives, obtained with a slit-width of 0.41 millimeter which did not resolve the *H* and *K* lines of the solar spectrum, exactly resembled the solar spectrum and were much stronger than those obtained in 1907 on Mount Hamilton, but not sufficiently so for reproduction. However, they showed with certainty the two absorption lines.

Mr. Fath says:

> A comparison of this plate with one of the sky spectrum taken with the same slit-width [0.41 millimeter] shows these lines to be *G* and the blend of *H* and *K* of the solar spectrum. These are the only lines shown on the sky comparison plate within the limits of the spectrum obtained on the Zodiacal Light plate. There is no indication of bright lines on any of the spectrograms of the Zodiacal Light. Thus, in so far as spectra of such low dispersion and resolving power can be trusted, we would seem to have good evidence to support the claim that the Zodiacal Light is reflected sunlight.—*C. A., jr.*

[1]Lick Observatory Bulletin, No. 165. [Dated October, 1909.]

THE WEATHER OF THE MONTH.

By Mr. P. C. DAY, Acting Chief, Climatological Division.

PRESSURE AND WINDS.

The distribution of the mean atmospheric pressure for June, 1909, over the United States and Canada is graphically shown on Chart VI, and the average values and departures from the normal are shown for each station in Tables I and III.

The general distribution of the mean atmospheric pressure for the month compared favorably with the normal. Pressure slightly above normal prevailed over the more northerly districts of the United States and the western portions of Canada, the maximum excess, about 0.10 inch, occurring in the upper Missouri Valley, and pressure slightly below normal obtained over the Canadian Maritime Provinces and portions of New England.

From May to June there was a general and rather uniform increase in pressure over all districts of the United States, except along the Pacific coast and also over the whole of Canada, except in parts of the St. Lawrence Valley. Over the interior districts the increase ranged from 0.05 to 0.10 inch, with maximum values over the upper Mississippi and middle Missouri valleys.

The storm tracks were somewhat erratic in their direction of movement and were as a rule but shallow depressions having their origin in most cases over the eastern slopes of the Rocky Mountains. West of the mountains the month was unusually free from decided atmospheric pressure variations.

Warm southerly winds occurred at frequent intervals over nearly all districts east of the Rocky Mountains and the prevailing direction of the winds for the month over those districts was from some southerly point.

On the Pacific coast northwesterly winds predominated, and the prevailing winds were from the north along the northern border as far east as the Great Lakes. Over the greater portion of the region from the Great Lakes and lower Mississippi Valley westward, the wind movement was decidedly sluggish, especially over portions of the Great Plains where the average velocity ranged from 20 to as much as 50 per cent less than the normal. Over the Atlantic coast and Gulf States there was a general but not large increase of wind velocity, the excess ranging from 10 to 30 per cent.

TEMPERATURE.

The mean temperature for the month as a whole was close to the normal, although during several periods there were decided variations both above and below the usual seasonal temperature.

During the first week the temperature averaged well above the normal in all districts, except over portions of the lower Mississippi Valley and in northern New England. The week was decidedly warm over the central and southern portions of the Plateau and Pacific coast districts, the excess above the normal ranging from 6° to 9° per day. The day temperatures were high also in the above districts, the maximum temperatures exceeding 100° over large portions of the southwest and exceeding by several degrees any previous record for the same season of the year at a number of points.

The second week was generally cool over all northern and western districts, the mean temperature over the Missouri and upper Mississippi valleys, and northern Rocky Mountain regions, ranging from 6° to 9° below the normal.

Over the South Atlantic and Gulf States it was somewhat warmer than the normal, and there was a slight excess along the north Pacific coast. No unusual extremes of temperature occurred except over northern New England, where temperatures close to freezing occurred and also at exposed points in the mountain regions of the West.

During the third week there was a considerable warming up over the northern districts from the Great Lakes westward to the Pacific, and in the Great Plains region, and it continued warm over the greater part of the Gulf States. The weather continued cool over the southwest and portions of the Lake region and New England.

There was a marked increase in temperature during the last week of the month over all districts east of the Rocky Mountains, the mean temperatures for the week ranging from 6° to 9° above the normal over the Lake region, New England and Middle Atlantic States, and somewhat less over the remaining districts. High day temperatures prevailed during most of the week, and the night temperatures were frequently oppressive. There was a decided warming up also over the South-

west, but along the northern border from North Dakota westward to the Pacific the week was comparatively cool.

PRECIPITATION.

June was a month of generally heavy and well-distributed rainfall over nearly all districts east of the Rocky Mountains, the only marked exceptions being in portions of New England, where the rainfall was light during the latter part of the month, over portions of the Florida Peninsula, where the fall though light was generally sufficient for the needs of growing vegetation, and locally in portions of Arkansas, Oklahoma, and Texas, where the amounts for the several weeks were insufficient.

West of the Rocky Mountains there was a general deficiency, though the lack of precipitation was not seriously felt on account of the general excess of moisture in the soil from the heavy precipitation earlier in the season, and the abundant supply of water available in the streams for irrigation, except in portions of Arizona and New Mexico where the lack of rainfall with attendant hot weather seriously damaged pasturage on the ranges.

The total precipitation for the month ranged from 6 to 10 inches in portions of eastern Colorado and western Kansas, in the middle Mississippi and lower Missouri valleys, and over large portions of the southern Appalachian Mountain region and the east Gulf States; elsewhere over the districts east of the Rocky Mountains the monthly amounts were generally from 2 to 4 inches. Over the main ranges of the Rocky Mountains and along the north Pacific Coast the amounts were generally from 1 to 2 inches, while over the Plateau and Pacific coast States, except along the coast of Oregon and Washington, the total fall for the month was generally less than 0.5 of an inch, and in large portions of southern California not more than traces occurred.

Some snow occurred in the high ranges of the Sierra and Rocky Mountains, the total fall at local points in Colorado and Wyoming amounting to 10 and in some cases to 20 inches.

High waters were general in the mountain districts due to the melting of the large accumulation of snow during the past winter, and water for irrigation purposes was generally plentiful.

The month was remarkably free from severe storms, although some damage resulted from a series of tornadoes in Missouri on the 22d and in Kansas on the 24th.

HUMIDITY AND SUNSHINE.

The relative humidity was above the normal from 5 to 10 per cent over most of the interior portions of the country east of the Rocky Mountains, except in portions of Texas and adjoining portions of Louisiana and Oklahoma. The relative humidity was below the normal over New England and generally over the Plateau and north Pacific coast districts.

Much cloudy weather prevailed during the month over all districts, except in portions of the Southwest and from the upper Lakes westward to Montana, where sunshine was generally above the average. Over large portions of the Appalachian Mountain region and Ohio Valley the percentage of sunshine was not much above 30 per cent of the possible.

In Canada.—Director R. F. Stupart says:

The temperature was generally and uniformly a little above the average throughout the Dominion, the positive departure in nearly all districts varying from 1° to 2°, although in isolated localities it was as much as 3°.

The rainfall was very deficient in nearly all portions of the Dominion, except in a few isolated localities, noticeably in the Gaspe Peninsula, and in the extreme southwestern portion of Saskatchewan, where for the most part the usual quantity appears to have been well exceeded. Ottawa City recorded an amount in excess of the average, also a few places in the extreme southwestern counties of Ontario, in each instance owing to the prevalence of thunderstorms in the localities affected. In British Columbia the negative departure varied from six-tenths of an inch to three inches. In the Western Provinces the deficit was very genreally from one to two inches, in Ontario from one and a quarter to two inches and a half, in Quebec, from three-fourths of an inch to over two inches, and in the Maritime Provinces from one-half to nearly three inches.

Average temperatures and departures from the normal.

Districts.	Number of stations.	Average temperatures for the current month.	Departures for the current month.	Accumulated departures since January 1.	Average departures since January 1.
		°	°	°	°
New England	12	64.6	+ 1.0	+ 5.1	+ 0.8
Middle Atlantic	16	71.2	+ 1.0	+11.9	+ 2.0
South Atlantic	10	77.7	+ 1.6	+12.5	+ 2.1
Florida Peninsula	8	80.9	+ 1.2	+15.4	+ 2.6
East Gulf	11	78.9	+ 0.8	+ 7.2	+ 1.2
West Gulf	10	79.6	+ 0.8	+ 8.5	+ 1.4
Ohio Valley and Tennessee	13	73.9	+ 0.7	+ 7.9	+ 1.3
Lower Lakes	10	66.2	− 0.7	+ 4.2	+ 0.7
Upper Lakes	12	62.9	+ 0.8	+ 4.8	+ 0.8
North Dakota*	9	63.1	+ 0.5	− 3.4	− 0.6
Upper Mississippi Valley	14	70.6	− 0.2	+ 2.6	+ 0.4
Missouri Valley	12	70.8	− 0.2	+ 3.0	+ 0.5
Northern slope	9	62.2	+ 0.1	− 4.6	− 0.8
Middle slope	6	72.2	+ 0.5	+ 1.8	+ 0.3
Southern slope	8	77.6	+ 0.8	+ 7.6	+ 1.3
Southern Plateau*	11	73.2	+ 0.8	− 4.2	− 0.7
Middle Plateau*	11	65.5	+ 1.9	+ 2.6	+ 0.4
Northern Plateau*	12	62.2	+ 0.1	− 1.4	− 0.2
North Pacific	7	57.1	− 0.4	− 6.7	− 1.1
Middle Pacific	5	62.9	− 1.4	− 0.1	0.0
South Pacific	4	65.5	− 0.6	− 0.2	0.0

*Regular Weather Bureau and selected cooperative stations.

Average precipitation and departures from the normal.

Districts.	Number of stations.	Average.		Departure.	
		Current month.	Percentage of normal.	Current month.	Accumulated since Jan. 1.
		Inches.		*Inches.*	*Inches.*
New England	11	2.64	87	− 0.40	+ 2.10
Middle Atlantic	16	4.38	122	+ 0.80	+ 0.20
South Atlantic	11	5.36	110	+ 0.50	− 2.00
Florida Peninsula*	8	7.56	114	+ 0.90	− 0.90
East Gulf	11	7.20	160	+ 2.70	+ 7.80
West Gulf	10	2.63	72	− 1.10	− 6.50
Ohio Valley and Tennessee	13	5.25	124	+ 1.00	+ 3.70
Lower Lakes	10	2.87	80	− 0.70	+ 3.30
Upper Lakes	12	2.84	83	− 0.60	+ 0.60
North Dakota*	9	2.99	81	− 0.70	− 0.40
Upper Mississippi Valley	15	3.70	86	− 0.60	+ 2.30
Missouri Valley	12	4.76	107	+ 0.30	+ 1.40
Northern slope	9	3.54	151	+ 1.20	+ 0.50
Middle slope	6	3.00	94	− 0.20	− 1.70
Southern slope*	8	3.14	89	− 0.40	− 4.40
Southern Plateau*	10	0.17	46	− 0.20	− 1.40
Middle Plateau*	11	0.24	44	− 0.30	− 0.60
Northern Plateau*	12	1.30	100	0.00	− 0.80
North Pacific	7	0.96	47	− 1.10	− 2.50
Middle Pacific	7	0.08	28	− 0.20	+ 6.70
South Pacific	4	0.05	100	0.00	+ 5.20

*Regular Weather Bureau and selected cooperative stations.

Average relative humidity and departures from the normal.

Districts.	Average.	Departure from the normal.	Districts.	Average.	Departure from the normal.
New England	73	− 6	Missouri Valley	74	+ 7
Middle Atlantic	75	− 2	Northern slope	65	+ 8
South Atlantic	81	+ 3	Middle slope	67	+ 7
Florida Peninsula	80	0	Southern slope	58	+ 2
East Gulf	78	+ 3	Southern Plateau	32	+ 2
West Gulf	76	0	Middle Plateau	35	− 2
Ohio Valley and Tennessee	76	+ 6	Northern Plateau	51	0
Lower Lakes	72	+ 1	North Pacific	71	− 5
Upper Lakes	74	+ 1	Middle Pacific	64	+ 2
North Dakota	74	+ 6	South Pacific	66	0
Upper Mississippi Valley	75	+ 5			

Average cloudiness and departures from the normal.

Districts.	Average.	Departure from the normal.	Districts.	Average.	Departure from the normal.
New England	5.1	− 0.1	Missouri Valley	5.2	+ 0.3
Middle Atlantic	5.7	+ 0.7	Northern slope	4.9	+ 0.1
South Atlantic	5.6	+ 0.6	Middle slope	4.7	+ 0.7
Florida Peninsula	5.6	+ 0.4	Southern slope	4.4	+ 0.6
East Gulf	5.5	+ 0.8	Southern Plateau	1.6	− 0.4
West Gulf	4.2	− 0.1	Middle Plateau	2.8	− 0.5
Ohio Valley and Tennessee	6.0	+ 1.0	Northern Plateau	4.8	+ 0.2
Lower Lakes	5.1	+ 0.2	North Pacific	5.0	− 1.1
Upper Lakes	5.2	+ 0.1	Middle Pacific	3.5	+ 0.2
North Dakota	4.6	− 0.8	South Pacific	3.6	+ 0.3
Upper Mississippi Valley	5.8	+ 0.8			

Maximum wind velocities.

Stations.	Date.	Velocity.	Direction.	Stations.	Date.	Velocity.	Direction.
El Paso, Tex.	25	54	ne.	Pt. Reyes Light, Cal. ..	2	54	nw.
Modena, Utah	18	60	sw.	Do	4	54	nw.
Mt. Tamalpais, Cal	11	60	nw.	Do	5	53	nw.
Do	14	80	nw.	Do	11	64	nw.
Do	23	50	nw.	Do	12	60	nw.
Do	25	64	nw.	Do	13	72	nw.
Do	26	54	nw.	Do	14	61	nw.
North Head, Wash	27	64	se.	Do	25	76	nw.
Oklahoma, Okla	29	50	n.	Do	26	65	nw.
Pierre, S. Dak	20	51	sw.	Do	27	54	nw.
Pittsburg, Pa	27	52	w.	Do	28	53	nw.
Pt. Reyes Light, Cal.	1	54	nw.	Do	29	50	nw.

RAINFALL IN JAMAICA.

Through the kindness of Mr. Maxwell Hall, meteorologist to the government of Jamaica and now in charge of the meteorological service of that island, we have received the following data:

The rainfall for the island for the month of June was a little above the average. The greatest rainfall, 20.39 inches, was recorded at Brownsville, Hanover. The least rainfall, 1.09 inches, was recorded at Southfield, St. Anns.

Comparative table of rainfall.

[Based upon the average stations only.]

JUNE, 1909.

Divisions.	Relative area.	Number of stations.	Rainfall.	
			1909.	Average.
			Inches.	*Inches.*
Northeastern division	25	17	4.98	6.59
Northern division	22	41	5.22	4.33
West-central division	26	20	9.46	8.33
Southern division	27	26	6.01	5.20
Means	100		6.42	6.11

CLIMATOLOGICAL SUMMARY.

By Mr. P. C. Day, Acting Chief, Climatological Division.

TEMPERATURE AND PRECIPITATION BY SECTIONS, JUNE, 1909.

In the following table are given, for the various sections of the Climatological Service of the Weather Bureau, the average temperature and rainfall, the stations reporting the highest and lowest temperatures with dates of occurrence, the stations reporting the greatest and least monthly precipitation, and other data, as indicated by the several headings.

The mean temperatures for each section, the highest and lowest temperatures, the average precipitation, and the greatest and least monthly amounts are found by using all trustworthy records available.

The mean departures from normal temperature and precipitation are based only on records from stations that have ten or more years of observations. Of course the number of such records is smaller than the total number of stations.

Section.	Temperature—in degrees Fahrenheit.							Precipitation—in inches and hundredths.					
	Section average.	Departure from the normal.	Monthly extremes.					Section average.	Departure from the normal.	Greatest monthly.		Least monthly.	
			Station.	Highest.	Date.	Station.	Lowest. Date.			Station.	Amount.	Station.	Amount.
Alabama	78.0	0.0	Flomaton	100	18	Madison	53 3	7.82	+ 3.55	Guntersville	14.28	Uniontown	3.16
						Scottsboro	53 1						
Arizona	78.1	− 0.6	Mohawk Summit	121	30	Flagstaff, B	27 21	0.16	− 0.04	Dos Cabezos	1.44	17 stations	0.00
Arkansas	76.9	+ 0.2	Pocahontas	104	8	Dutton	49 4	4.08	− 0.17	Mammoth Spring	8.68	Newport, No. 2	1.26
California	68.1	− 1.1	Mammoth Tank	115	30	Tamarack	21 2	0.19	− 0.15	North Bloomfield	2.00	50 stations	0.00
						Truckee	21 1						
Colorado	61.8	+ 0.2	Las Animas	107	28	Wagon Wheel Gap	20 9,20	1.51	+ 0.41	Cheyenne Wells	8.62	River Portal	0.00
Florida	80.7	+ 0.8	Johnstown	102	14	Middleburg	56 1	6.28	− 0.69	Tarpon Springs	18.10	Carrabelle	1.65
Georgia	78.5	+ 0.5	Blakely	104	17	Diamond	55 5	5.48	+ 0.96	Clayton	14.65	Helena, Montezuma	1.86
Hawaii (May)	70.6	.....	3 stations	90	3 d't's	Humuula, Hawaii	35 3,18	5.24	.....	Honomanu Valley	23.74	3 stations	0.00
Hawaii (June)	72.0	.....	Kihei	90	5,26	Humuula, Hawaii	35 11	4.26	.....	Honomanu Valley	21.21	3 stations	0.00
Idaho	61.6	+ 1.9	Garnet	103	30	Forney	26 6	0.70	− 0.41	Bonners Ferry	2.43	2 stations	0.00
Illinois	72.7	+ 0.4	Chester, Mt. Vernon	93	3 d't's	6 stations	39 3 d't's	4.15	+ 0.41	Robinson	8.75	Du Quoin	1.34
Indiana	72.2	+ 0.7	Rome	97	28	Auburn	39 19	5.16	+ 1.08	Rochester	9.02	Greensburg	2.34
Iowa	69.1	+ 0.3	Keosauqua	96	26	Elma	40 15	6.41	+ 1.89	Afton	13.30	Davenport	2.80
Kansas	73.1	+ 0.3	Lakin	104	29	Colby	42 3	5.45	+ 0.90	Wakeeney	12.07	Coolidge	0.79
Kentucky	74.5	+ 0.4	Calhoun	99	28	Maysville	43 19	5.05	+ 0.71	Berea	10.20	Blandville	2.31
Louisiana	81.9	+ 0.3	Opelousas	103	16	Monroe	54 2	6.51	+ 1.21	Pearl River	16.50	Minden	1.44
Maryland and Delaware	71.8	+ 1.1	Cambridge, Md	98	25	Deer Park, Md	32 18	5.04	+ 1.01	Bachmans V'y, Md	10.45	Clear Spring, Md	2.72
			Millsboro, Del	98	25								
Michigan	64.3	+ 0.5	Powers	96	13	Chatham	28 18	3.15	+ 0.13	Grand Rapids	7.50	St. Ignace	0.30
						Wetmore	28 8,18						
Minnesota	65.0	+ 0.5	Baudette	97	19	International Falls	29 14	3.53	− 0.73	New Ulm	8.30	Floodwood	0.72
Mississippi	78.6	− 0.2	Duck Hill	100	27,28	5 stations	60 5 d't's	6.53	+ 2.91	Pearlington	16.09	Hernando	1.95
Missouri	73.9	+ 0.5	Caruthersville	98	27	Sublett	48 18	5.21	+ 0.43	Gallatin	10.05	Cape Girardeau	0.74
Montana	59.4	+ 1.2	Bridger	103	29	Bowen	24 6	3.02	+ 0.08	Highwood	6.89	Homepark	0.46
Nebraska	69.0	+ 0.4	Beaver City	108	29	Kimball	33 11	4.26	+ 0.41	Westpoint	9.94	Greeley	0.55
Nevada	65.5	+ 2.3	Logan	112	30	Cobre	24 9	0.28	− 0.14	Lovelock	1.95	8 stations	0.00
New England*	64.9	+ 0.4	W. Ossipee, N. H	100	25	Van Buren, Me	20 2	2.58	− 1.04	Alstead Center, N.H.	4.68	Provincetown, Mass	0.69
New Jersey	70.0	+ 0.8	Somerville	99	25	Rivervale	36 19	3.26	− 0.55	Cape May C. H	5.70	Runyon	1.71
New Mexico	70.0	+ 0.1	Gage	104	25	Elizabethtown	23 9	0.91	− 0.30	Dorsey (near)	5.21	3 stations	0.00
New York	65.1	+ 0.6	Bedford	99	25	Nehasane	21 8	2.86	− 0.85	Newark Valley	6.15	Chazy	0.65
North Carolina	75.9	+ 1.6	Goldsboro	99	26,28	Banners Elk	42 19	7.92	+ 2.91	Newbern	17.05	Wilmington	2.57
North Dakota	62.9	+ 0.6	Bismarck	98	28	Berthold Agency	28 14	3.21	− 0.38	Amenia	7.65	Portal	1.10
			Medora	98	22								
Ohio	70.1	+ 0.8	Ironton, Waverly	96	27	Rome	36 16	5.86	+ 1.91	Benton Ridge	12.70	Sidney	2.63
Oklahoma	76.5	+ 0.9	Beaver	104	6	5 stations	50 3 d't's	3.45	− 0.52	Chattanooga	8.87	Wagoner	1.11
			Chickasha	104	17								
Oregon	59.4	+ 0.4	3 stations	100	4 d't's	Christmas Lake	20 8	0.66	− 0.94	Bay City	2.34	Hood River	T.
Pennsylvania	68.8	+ 0.8	Philadelphia, C	96	26	Saegerstown	34 16	4.48	+ 0.31	State College	8.96	Milford	1.89
Porto Rico	77.8	− 0.5	Bayamon	96	1	Jayuya	58 6	7.63	+ 0.62	San Sebastian	18.54	Jayuya	2.46
						Maricao	58 3						
South Carolina	79.2	+ 1.2	Florence	105	27	Darlington	58 16	6.87	+ 1.82	Anderson	12.42	Charleston	1.64
South Dakota	66.9	+ 1.5	Cascade Springs	103	29	Pollock	34 14	4.10	− 0.33	Dumont	9.65	Chamberlain	0.63
Tennessee	75.6	+ 0.6	Jackson	99	24,29	Mountain City	43 19	5.44	+ 1.18	Charleston	13.83	Memphis	1.78
Texas	80.9	+ 1.2	Brownwood	107	28	Claude	44 1,3,4	3.37	− 0.35	Bridgeport	10.75	El Paso	0.05
Utah	66.2	+ 1.3	Green River	110	30	Scofield	20 10	0.14	− 0.36	Government Creek	0.79	10 stations	0.00
Virginia	73.0	+ 1.3	Lincoln	98	26	Burkes Garden	35 19	6.24	+ 1.93	Elk Knob	10.76	Shenandoah	2.70
Washington	61.0	0.0	Cheney	102	29	Clealum	25 28	0.90	− 0.96	Quinault	4.43	Kennewick	0.06
West Virginia	71.1	+ 1.9	Sutton	101	27	Arbovale, Bayard	35 19	5.73	+ 1.16	Terra Alta	9.19	Lewisburg	2.47
Wisconsin	65.0	− 0.3	Neillsville	99	29	Long Lake	29 18	3.93	− 0.14	Stanley	7.61	Herbster	0.87
			Muscoda	99	30								
Wyoming	58.9	+ 1.1	Basin	103	29	Kirwin	22 11	2.27	+ 0.74	Wyncote	5.98	Snake River, Y.N.P	0.07

*Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut.